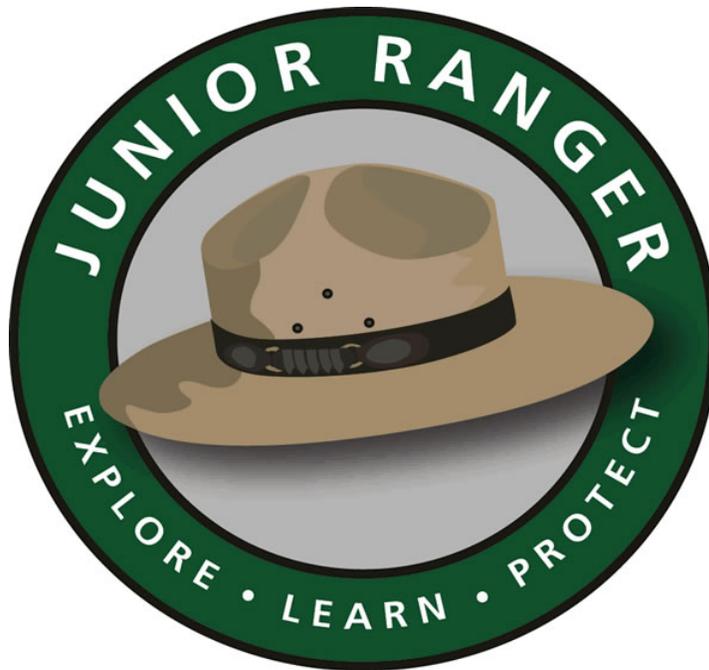


Missouri River

Missouri National Recreational River



Junior Ranger Activity Book



**EXPLORE THE
"BIG MUDDY"**

To earn your Junior Ranger Badge

You will need:

- This activity book
- A pen or pencil
- A visitor center activity sheet
- A park brochure and map
and
- An adult to take you to the sites and enjoy the activities with you



1. Complete a Discovery Trail, Adventure Trail, or Explorers' Trail Activity sheet at the Lewis & Clark Visitor Center and keep it to turn in with this book.
2. Read about the park and have some fun with maps! Use the park brochure to identify the park sites on the next pages.
3. Complete the **National Park Service** pages in this book – discover how many different National Parks there are and what rangers do.

Program _____

Ranger _____ Date _____

4. Visit **6** of these sites and complete the activities in this book for each one you visit.

- Fort Randall Overlook
- Yankton Sioux Treaty Monument
- Niobrara State Park (state park fees apply)
- Chief Standing Bear Bridge Overlook
- Gavins Point Dam Overlook
- Ponca State Park (state park fees apply)
- Mulberry Bend Overlook
- Spirit Mound Historic Prairie
- Yankton's Riverside Park
- Corps of Discovery Welcome Center

You can also attend a ranger program and visit only **5** sites. Have the ranger sign this page.

Bring your completed booklet back to a National Park Ranger at the Lewis & Clark Visitor Center, or mail it to:

Junior Ranger Program
Missouri National Recreational River
PO Box 666
Yankton SD 57078

Junior Ranger Candidate:

Name _____

Address _____

City _____ State _____ Zip _____



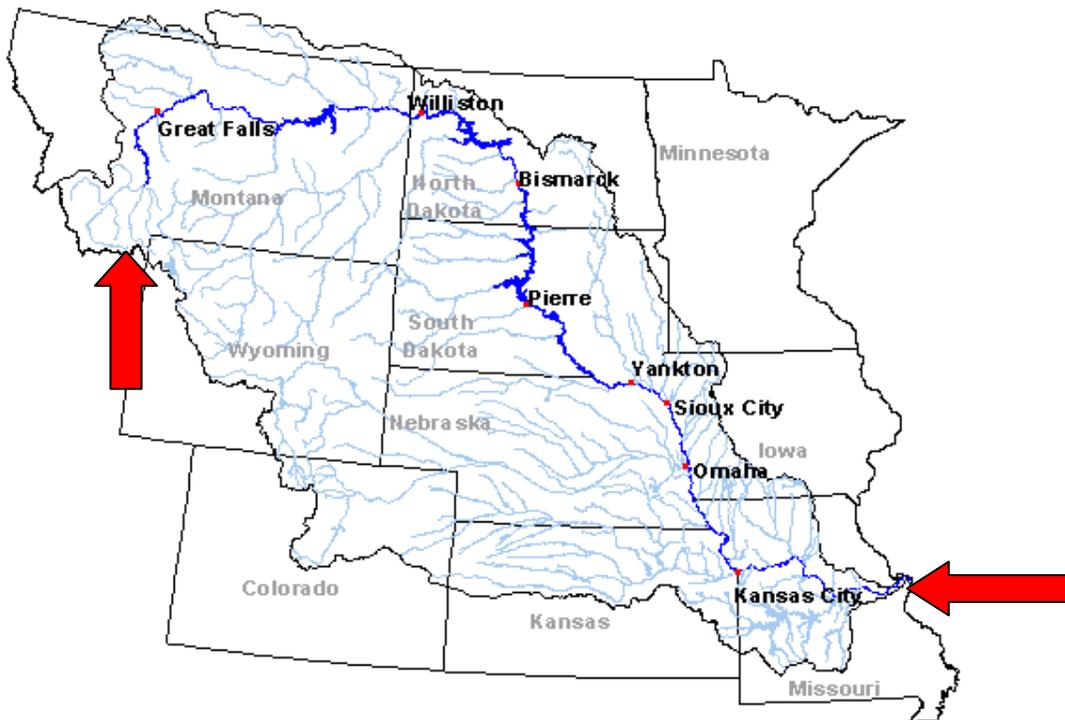
Questions or Comments? Write us at the above address or call 402-667-2550
www.nps.gov/mnrr

Missouri River

Missouri National Recreational River



Missouri National Recreational River! Wow! That's a long name for a park. But it's a very long park on a very long river! Did you know that the Missouri River measures over 2600 miles from its source in the mountains of Montana to St. Louis? That's longer than the distance from New York City to Los Angeles!



For many years, people have tried to tame the Missouri; part of it has been narrowed and deepened to carry barges, and part of it is backed up behind six big dams. Only one-third of the Missouri is still really a river, so Congress decided that some of it should be protected as one of America's Wild and Scenic Rivers. Our congressional representatives gave 98 miles of the Missouri that long name and put the National Park Service in charge of it. The National Park Service manages and protects the Missouri River with the help of many other departments of our state and federal governments.

Now you can experience these wild parts of the "Big Muddy" and the exciting history they hold.

The 39 Mile District of Missouri National Recreational River

Match the **LOCATION** with the correct **NAME** of that location on the 39-mile district of the MNRR. Write the number of each location on the line to the left of the name.



Use the official MNRR brochure for help!



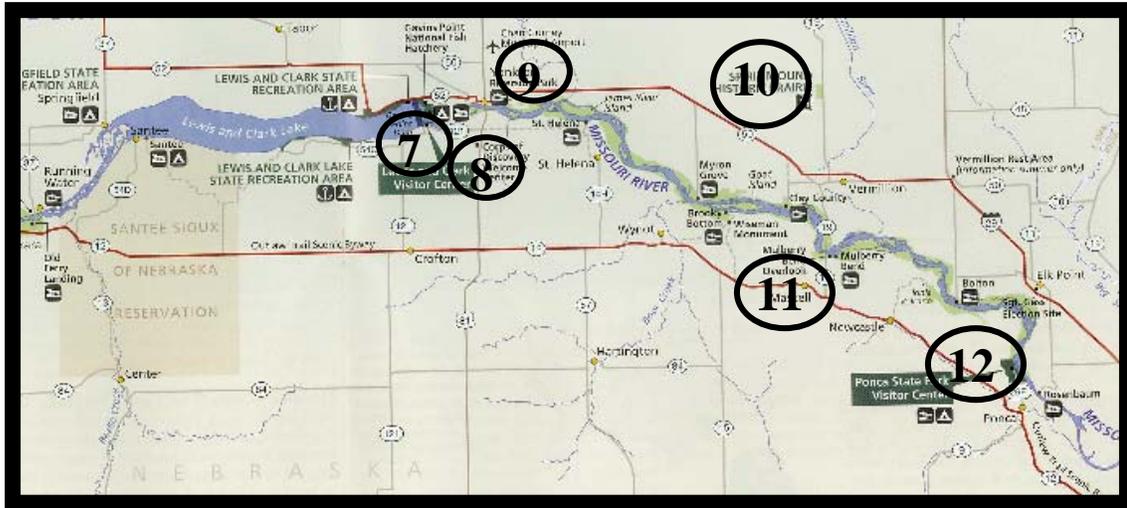
- | | |
|---|--|
| <ul style="list-style-type: none"> • ___ Old Baldy Overlook • ___ Niobrara State Park • ___ Chief Standing Bear Memorial Bridge Overlook | <ul style="list-style-type: none"> • ___ Fort Randall Dam Overlook • ___ Yankton Sioux Treaty Monument • ___ Karl E. Mundt National Wildlife Refuge |
|---|--|

The 59 Mile District of Missouri National Recreational River

Match the number of each **LOCATION** with the correct **NAME** of that location on the 59-mile district of the MNRR. Write the number of the of each location on the line to the left of the name.



Use the official MNRR brochure for help!



- ___Ponca State Park Visitor Center
- ___Gavins Point Dam Visitor Center
- ___Mulberry Bend Overlook
- ___Corps of Discovery Welcome Center
- ___Yankton Riverside Park
- ___Spirit Mound Historic Prairie

Yankton Sioux Treaty Monument



Navigate! From Pickstown, go east on Hwy 46, turn south on the road to Marty and the Yankton Sioux Headquarters. At the church, turn left and then the next right, follow the turns of the paved road a little over 6 miles. Look for a cemetery on the left; the monument is the next left. Return to Hwy 46 or turn left at the end of the road and continue to Hwy 37.

Use the interpretive panel at the Yankton Sioux Treaty Monument to help you answer the following questions, and brainstorm your responses as asked below. Draw a picture of the monument in the box at the left.

Treaty of 1858:

The Yankton Sioux had to decide whether to join other armed Sioux tribes for war or to co-exist in peace with the immigrants. They chose _____.

After selling most of its lands to the U.S. Government, the tribe agreed to move to a reservation located on the _____ side of the Missouri River.

Imagine that you were a leader of the Yankton Sioux Tribe living at this time. Would you have chosen to join with the other Sioux tribes in armed resistance against the incoming settlers, or would you have chosen peace (as this tribe did)? Think of some pros and cons for each possibility before you decide.

Armed resistance against settlers:

Pros

Cons

Co-existence with settlers:

Pros

Cons

Circle your final decision:

Resistance

Co-existence

Think about how you would explain your decision to your fellow leaders and to members of your clan or *Oyate*.



Fort Randall Overlook

Hwy 281 West of Fort Randall Dam – Look for sign at top of hill

Use the panel “A Home for Wildlife” at Fort Randall Overlook to answer a few questions. Then, test your ability to answer some fun facts about eagles below! The answers to the eagle trivia can be found on the back of this page....no peeking till you’ve tried!!!

A Home for Wildlife

_____ trees stand in one of the last stretches of the natural Missouri River bottomlands.

Before the dams were built, the free flowing river yielded _____, waterfowl and other wildlife that the _____ preyed upon.

Senator _____ E. _____ was a strong supporter of the Endangered Species Act which has caused the bald eagles to make a dramatic comeback.

The Karl Mundt National Wildlife Refuge lands provide _____ and _____ areas for the eagles.



Eagle Fun Facts!



1. The body of an eagle is made for flying and catching prey. To do these things, the body must be:
 - a. Heavy and strong
 - b. Light and strong
 - c. Heavy and weak
2. A Bald Eagle has more than 7,000 feathers. All of these feathers put together weight about:
 - a. 21 ounces.
 - b. 2 pounds
 - c. 10 pounds
3. Most eagles have wings that are:
 - a. Short and wide
 - b. Long and narrow
 - c. Long and wide
4. Eagles are wonderful fliers and some can swoop through the air at incredible speeds. As they dive, they may go as fast as:
 - a. 40 miles per hour
 - b. 100 miles per hour
 - c. 200 miles per hour
5. As an eagle soars high above the earth, it is in a perfect position to see prey below on the ground. How does the eyesight of an eagle compare to that of a human?
 - a. Eagle eyesight is much better
 - b. Human and eagle eyesight is about the same.
 - c. Human eyesight is much better
6. Eagles prefer to eat their prey:
 - a. On the ground
 - b. In a tree
 - c. Near the water



Answers to “Eagle Fun Facts”

1. B – It must be light enough to get off the ground and fly high in the air, but strong enough to swoop down on prey and carry it away.
2. A – If you took 30 of these feathers in your hand, they would weigh less than a penny. But don't collect eagle feathers! Only American Indians can legally own them for religious and ceremonial purposes.
3. C – Wide wings hold a bird in the air at low speeds and provide extra lift for lifting prey off the ground.
4. B – Most experts estimate eagle diving speed at around 100 mph. A smaller predator, the peregrine falcon, has much slimmer wings and can approach 200 mph in a dive.
5. A – The term “eagle eye” means very sharp vision, and that's what eagles have. They can focus on small objects at great distances and can see 8 times more clearly than humans. An eagle can probably see a rabbit 2 miles away!
6. B – Once an eagle captures its prey, it usually flies up into a tree with it where it is safe from other predators that would try to steal its meal.



Niobrara State Park

Use the state park map to find the interpretive panels at Niobrara State Park to help you answer the following questions. Use the number corresponding with the chosen letter in your answer to fill in the blanks at the bottom. Have fun!

The Great Missouri River – at Cramer Interpretive Shelter

- The _____₂ River is the continent’s longest river.
- One nickname given to the continent’s longest river: “_____”₄
- Congress set aside _____ free-flowing portions as Missouri National Recreational River.₁



Astonishing Wildlife – at group lodge

- Lewis and Clark observed an animal new to science known as the _____₁₂.
- This “critter” was finally _____ from its hole after a long struggle.₃
- What French term did Clark use to identify the Niobrara? _____₉

Ever Changing Sandbars – At Cramer Interpretive Shelter

- When the Niobrara’s flow is strong, it carries a lot of _____₇.
- When the Missouri is high, it backs up into the Niobrara and forces the sand and silt to drop _____₁₃.
- The Missouri and Niobrara are continually _____ the sandbars and moving them upstream and downstream.₁₁

Ponca Homeland– At Cramer Interpretive Shelter

- In the 1850’s, the Ponca were persuaded to _____ to a reservation 15 miles up the Niobrara.₁₀
- When matters worsened, they were forced to move to ______{15 14}.
- Chief _____ and 30 followers came back to Nebraska during the cold winter; the chief was arrested and filed suit for his release.₅
- After the trial, many Poncas _____ to their homeland.₈



Along with a portion of the Missouri River, 20 miles of the Niobrara has been designated by congress as a

_____ and _____.

to be administered by the:

Chief Standing Bear Memorial Bridge Overlook

East side of SD Hwy 37, north side of river

Use the interpretive panels at Chief Standing Bear Overlook to help you with the following activity. The scrambled words at the bottom of the page are the answers to the questions above them. Unscramble the words and match the correct answer with the correct question. Then, take the letters that appear in the circle boxes and unscramble them for the final message.

1. During the summer of 1804, the Missouri river below looked very _____.
2. The National Recreational River consists of 2 untamed segments of the Missouri plus segments of
3. the _____ and _____. (Hint: This question has 2 answers!)
4. The Captains of the Corps of Discovery believed they saw _____ Indians near the shore at this location.
5. The Indians that the captains ACTUALLY saw were their friends, the _____ Indians.
6. To move their watercraft through the water, the Corps of Discovery usually rowed, poled, or towed
7. through _____ waters.
8. When the Corps of Discovery reached this location, they thought that they were being shot at, but
9. the Indians were just _____ at an old keg floating down the Missouri River.

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NOKNATY UOSIX

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RETTAG GIHSTNOO

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FERNIETFD

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LESMARL

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RUEGOSNAD

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RONBAAIR RERVI

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			○	○											
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Today, most of the Missouri River is controlled by dams and levees. However, in portions that are now Missouri National Recreational River, the river flows
W

--	--	--	--

--	--	--	--

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as it did in the days of Lewis and Clark.

Corps of Discovery Welcome Center

2 miles south of the Meridian Bridge on US Hwy 81.

Find the three interpretive panels around the Corps of Discovery Welcome Center to help you answer the following questions. The first panel is located behind the building; from this panel, look to the right to find the other two at the top of the hill. When you have answered the questions, circle each answer in the word search below.

1. In 1911, a plan was drafted for a _____ that would run through America from Canada to Mexico.

2. The path of the Meridian Highway followed an Indian trade route that later served as the _____ Trail.

3. The highway was completed in 1924 with the opening of the _____ at Yankton, South Dakota.

4. On August 27, 1804, the Lewis and Clark Expedition set up its camp for four days downstream from _____.

5. Meriwether Lewis and William Clark held a great meeting and feast with the Yanktons upstream at Calumet Bluff on August 30-31 because _____ wanted them to establish good relations with the Indians.

M I S S O U R I N A T I O N A L M R
 E C R E A T I O N A L R R I V E E R
 N O S R E F F E J T N E D I S E R P
 D J K T P Y B D M R L W P M J G I H
 L T E R A S A E A I J P E L I F D X
 O O D I W D D W A M I N A O J L I A
 Q X J R N V S B H S M H C H Y C A O
 G Y Z N E E L E S G J E E S M Y N B
 H J D K O E I I P U I F D I F V B X
 Z Z R D T E S V T O E H I H Y C R I
 O L M R U S W E G M Z W H C B H I A
 O C A Q I M P J O X D Y N H J G D W
 U D R M D Y G U E M R E O C U J G U
 E F G X P S E I C J M S Z I Z L E O
 W Z S C H T P C B P I U Z Q D X N P
 R Z D O X H O J F H B W G X G E Q C
 Z L B P P Q P V G S L J X C K I W F
 F F U L B T E M U L A C I A L K F I

- | | |
|---------|----------|
| 1 _____ | 6 _____ |
| 2 _____ | 7 _____ |
| 3 _____ | 8 _____ |
| 4 _____ | 9 _____ |
| 5 _____ | 10 _____ |

6. At the meeting with the Yanktons, Lewis and Clark explained the expeditions's exploratory purposes and Jefferson's desire for _____.

7. Chief Shake Hand and Half Man spoke of the tribe's need for _____.

8. The Missouri is the continent's longest river flowing 2,341 miles from the Rocky Mountains to the _____.

9. _____ is loaded with sediment and steeped in stories about American Indians, Lewis and Clark, fur traders, and steamboat captains

10. Unlike _____ and channelized sections, these river segments provide opportunities to pursue outdoor activities within one of America's great historic settings.

After you've completed the wordsearch, a hidden message should be revealed. Write this hidden message below.

Riverside Park

Sculpting the Landscape

4 Down This forms as riverbanks bounce the river's energy back and forth

5 Down When meanders have been cut off and left dry by the river's main channel, _____ form.

6 Down Sometimes, rivers divide and follow both the older (deeper) and newer (shallower) channel. When this happens, what develops between these two channels?



15 across Another name for dead trees which have fallen into the water.

9 Across What forms as fast-moving water starts to slow downstream?

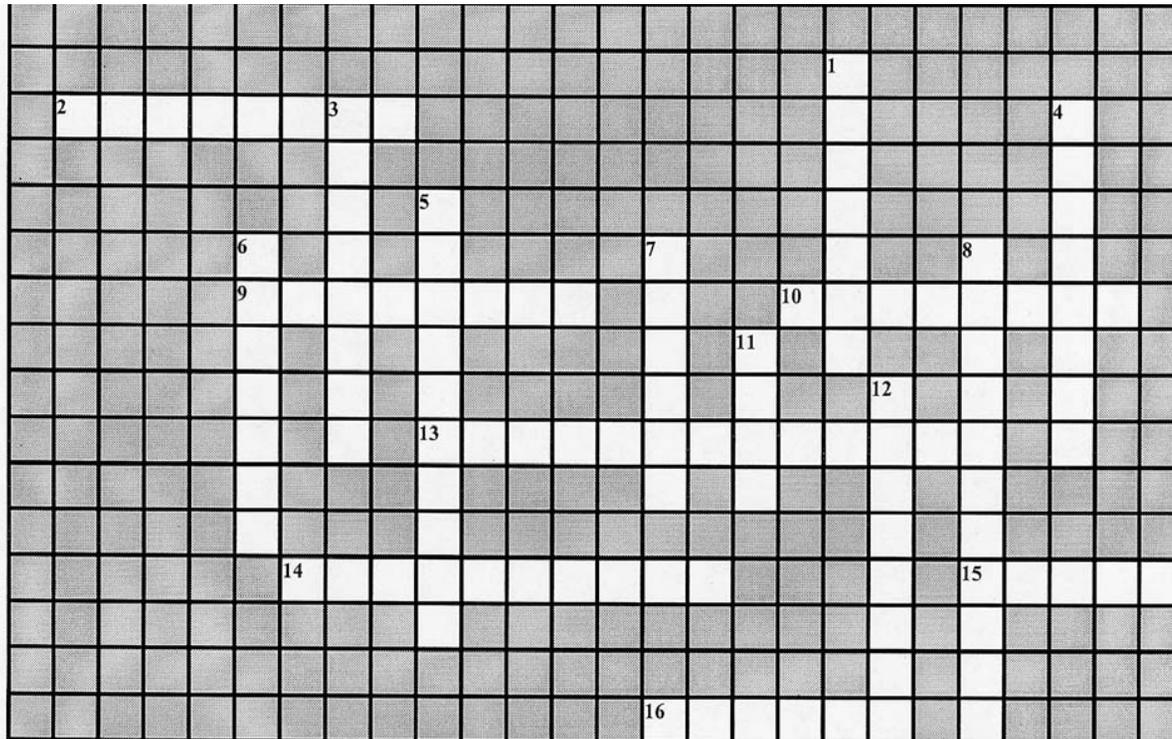
10 Across As rivers slice through the banks of a meander after a flood, _____ sometimes form

Yankton: Territorial Capital



12 Down William Jayne selected Yankton as the capital of the territory because of its _____ on the Missouri River.

2 Across Where was the capital moved to in 1883?



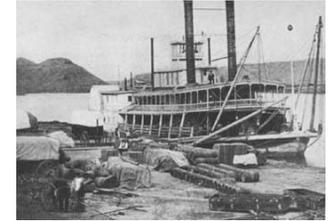
7 Down In 1889, South Dakota and North Dakota were established as _____.

Yankton Riverboats

3 Down Pilot Grant Marsh began his riverboat career as a _____.

13 Across Grant Marsh set a speed record bringing wounded soldiers back from the Battle of the _____.

16 Across Steamboats served forts, _____ agencies, and frontier villages.



Missouri River

1 Down Missouri National Recreational River consists of two _____ segments of the Missouri River.

8 Down Missouri National Recreational River is managed by a _____ of local, state, tribal, and federal agencies.

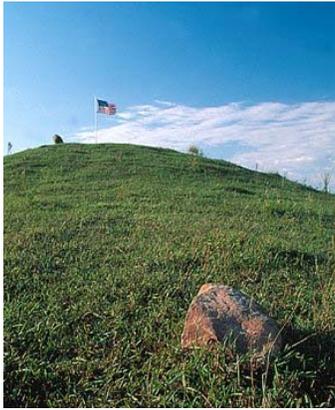
14 Across Everyone on a watercraft **MUST** have a _____.

11 Down Do not _____ alone!



Take a walk along the Big Muddy and find the interpretive panels to help solve this crossword puzzle.

Puzzle design by edhelper.com



Spirit Mound Historic Prairie

Hwy 19 north of Vermillion



Hike up the hill and use the interpretive panels along the trail to help you answer the questions. Then, use the letters from the numbered spaces to complete the message at the bottom of the page.

Spirit Mound Trail

Spirit Mound is a sacred _____ site for nearby American Indian Tribes.
16 2

Tribal members make pilgrimages to Spirit Mound as well as say prayers atop it, and leave
_____.
3

Hill of Little Devils

The Corps of Discovery traveled _____ miles to visit the "High Hill"
7

The Corp of Discovery did not see any _____, but they did see herds of _____
13 5
and _____ and flocks of _____.
16

The American Indians believed that birds gathered on the hill because of _____.
14

Canotina Wiconi Paha / Mountain of "little people"

The Canotina are also known as "_____."
5

Many of the American Indians believed that it was "_____ " to see
the Canotina.
17 8

A person who encounters a Canotina or is hurt with one of their arrows should see a
_____ to avoid _____.
12 1 9 4

Restoring the Prairie

Native grasses and _____ flowers are being restored on Spirit Mound.
10

The grasses big and little bluestem, Indian grass, and _____ grass may
grow 8-9 feet tall!
11

These grasses can _____ weather extremes, mowing, grazing, and fire.
13

By protecting Spirit Mound, the National Park Service and its partners preserve the

and

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

values of Missouri National Recreational River!

Mulberry Bend Overlook

Nebraska Hwy 15, SD 19, south of bridge



It's **just a footprint**, but when hundreds of people walk in the same place, the plants die and the soil becomes hard. When it rains, the bare soil is washed away and leaves a gully that keeps getting deeper and wider. The mats you see on the hillside here cover places where people have taken shortcuts straight up the hill. These mats hold the soil in place and help conserve moisture until new grass can grow.

Junior Rangers always stay on the trails!

Use the interpretive panels at Mulberry Bend to help answer these questions. After circling the correct answer, copy the code letter to the final question below.

Prehistoric Farmers

1. The American Indians who lived on the bottomlands 1,000 to 600 years ago:

- R. Were unlike their 19th-century descendants in several ways.
- A. Lived exactly like the Indians of the 19th century
- E. Lived very similar to the Indians of the 19th century

2. These prehistoric farmers

- W. Roamed the great plains
- U. Lived in portable hide-covered teepees
- E. Settled in villages consisting of rectangular houses covered with earth, thatch, or mud

3. The prehistoric farmers got their food by:

- L. Hunting and gathering foodstuffs
- E. Raising corn, squash, beans, and sunflowers and occasionally hunting.
- M. Walking to the nearest grocery store

4. The farming culture probably began to disappear because of

- O. Drought and Disease
- T. Warfare and Overpopulation
- F. All of the above

Vermillion Flood

5. The town of Vermillion was originally located:

- P. On the top of a bluff
- L. On the bottomlands just across the river
- A. In the side of a cliff

6. In 1881, the Missouri River began to rise rapidly after:

- G. It rained for 40 days and 40 nights
- Y. Everyone drained their bathtubs
- O. A 10 foot blanket of snow began to thaw in late March

7. The town of Vermillion was moved to:

- W. The top of a bluff
- S. The bottomlands just across the river
- R. The side of a cliff

Sculpting the Landscape

8. The Missouri decreases in elevation __ foot/feet for every mile

- I. 1
- E. 2
- A. 3

9. The waters of the Missouri National Recreational River

- M. Cut straight down through the valley.
- N. Wind around high spots, solid rocks, and resistant soils
- S. Move faster than any other river.

10. Below the dams, the relatively clear waters:

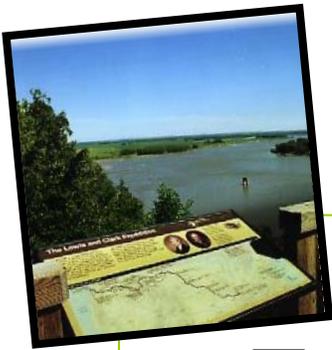
- R. Erode the sandy riverbanks and capture new loads of sediment
- P. Sculpt the landscape
- G. Both of the above



**Missouri
National
Recreational
River differs
from many other
rivers because it
has been set
aside to remain:**

F -
0 1 2 3

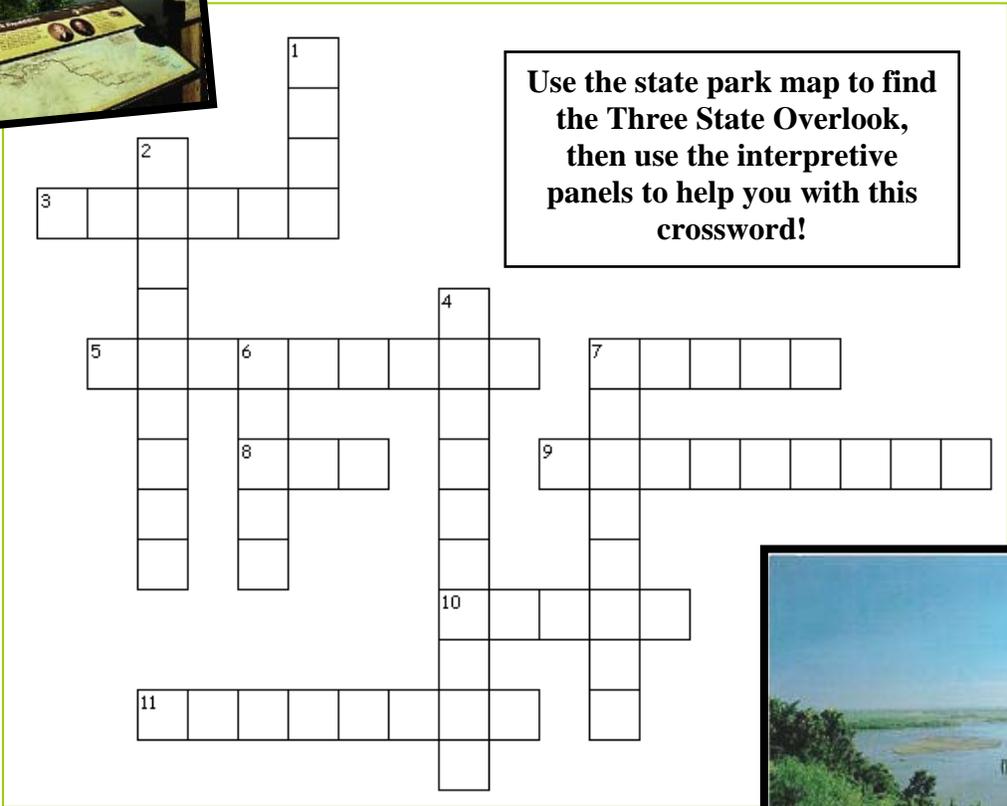
4 5 6 7 8 9 10



Ponca State Park

Three State Overlook

Use the state park map to find the Three State Overlook, then use the interpretive panels to help you with this crossword!



Across

- 3. 160 _____ and animals come together (many at the outer limits of their ranges.)
- 5. Commissioned the "Corps of Discovery" to find a route to the Pacific Ocean.
- 7. The right "face" of the Missouri is the new and _____.
- 8. The left "face" of the Missouri is _____ and wild.
- 9. The Missouri River below looked _____ in 1804 than it does today.
- 10. To move their watercraft through the water, the Corp of Discovery usually _____, poled, or towed through dangerous waters.
- 11. _____ (For 59 miles) the river flows free and appears much as it once did in the past.

Down

- 1. Today's course of the Missouri River is controlled by _____ and dikes.
- 2. Gass's skills as a _____ were valuable on the expedition.
- 4. _____ The river flows in a narrow, confined course between rock-lined banks for 750 miles to St. Louis.
- 6. Patrick Gass was elected to serve as the expedition's new sergeant following the death of Charles _____.
- 7. Along the lower Missouri, the Corps of Discovery averaged _____ miles per day!

While you are at this park, be sure to stop at the Visitor Center and see the Missouri National Recreational River exhibits.

National Park Service

Missouri National Recreational River



Your National Parks

The National Park Service was created by Congress in 1916 to manage America's special places so that everyone can enjoy and learn from them. This federal agency also protects these places so people can continue to enjoy them in the future. These parks belong to you and to all Americans.

There are many kinds of National Parks. In addition to those called National Parks, there are National Monuments, National Memorials, National Lakeshores and Seashores, National Battlefields, and National Rivers. These parks protect special natural or famous places, or commemorate famous people and events in American history. Some of them cover hundreds of square miles of land and some are as small as a house and yard.



Visit with a ranger or go to www.nps.gov and use the map on the next page to answer the questions below.

Circle the location of Missouri National Recreational River.

If you have visited any other National Parks, mark one on the map with a square and write the name of it here. _____

What other National Parks would you like to visit? List them and number each one on the map. You can pick up to 6 parks.

1 _____

4 _____

2 _____

5 _____

3 _____

6 _____



National Park Service

Missouri National Recreational River



What do Rangers do?

National Park Rangers do a lot of different jobs. Interpretive rangers tell visitors what their park is about and why it's an important place.

Protection rangers keep visitors safe and protect the important things in the park. Other rangers greet visitors at entrance stations and in visitor centers, hand out park maps, and issue park passes and hiking and camping permits. Many rangers do more than one of these duties, and some rangers do all of them and much more!



What Rangers do:

Study the history and nature of their park and present programs to visitors.

Keep visitors safe and enforce park rules.

Study the park's plants and animals and protect their habitats.

Keep the park clean.

Write about the important things in our parks.

What Junior Rangers can do:

Tell your friends about the parks you visit and why they are special places.

Always follow park rules and explore safely.

Learn about the plants and animals, and never disturb them or feed the animals.

Junior Rangers never litter and always help pick up after people who don't know how to care for their parks.

Write a story about your visit to Missouri National Recreational River on the next page. Tell us why you think the river is important and what you liked best about the park. We might even put your story on our web site!

My visit to Missouri National Recreational River

Thank you for joining our Junior Ranger program. We hope you had fun and learned lots of new and interesting things.

We're always trying to improve this program and would appreciate your comments.

Your age_____.

Did your adults have trouble finding any of the sites?_____

If so, which ones?

Did you find any of the activities too easy?_____

Did you find any of the activities too hard?_____

Which site was the most fun?_____

Which was the least fun?_____

Any additional comments:



Thanks for your help.

The National Park Rangers at Missouri National Recreational River



Junior Rangers

National Park Service
U.S. Department of the Interior



You could grow into a ranger hat, like Kelly hopes to someday!

Rangers learn all kinds of neat stuff and teach others to explore, learn, and protect.



National Parks are special places that are protected so that everyone can enjoy them and learn from them. Most National Parks have Junior Ranger programs and you can earn badges at all of them! These are just a few of the parks within a day's drive of Missouri National Recreational River.



Visit your National Parks online at: www.nps.gov

WebRangers



National Park Service
U.S. Department of the Interior



For more fun activities visit: www.nps.gov/webrangers